

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: FAIL-SAFE

Report Number: P1499596

Luminaire Tested: MAE-G-4-120-3LO-HI-40-90-VRDCPH

Issue Date: 6/26/2026

Test Information

Test Method: LM-79-2019
Report Number: P1499596
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P189188)
Test Lab: INNOVATION CENTER
Issue Date: 6/26/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: MAE-G-4-120-3LO-HI-40-90-VRDCPH
Description: Patient Room Recessed Ceiling Ambient, Exam LED luminaire with, VRDCPH frame, 3 LO ambient , HI exam illumination levels
Light Source: -
Ballast/Driver: -

Summary

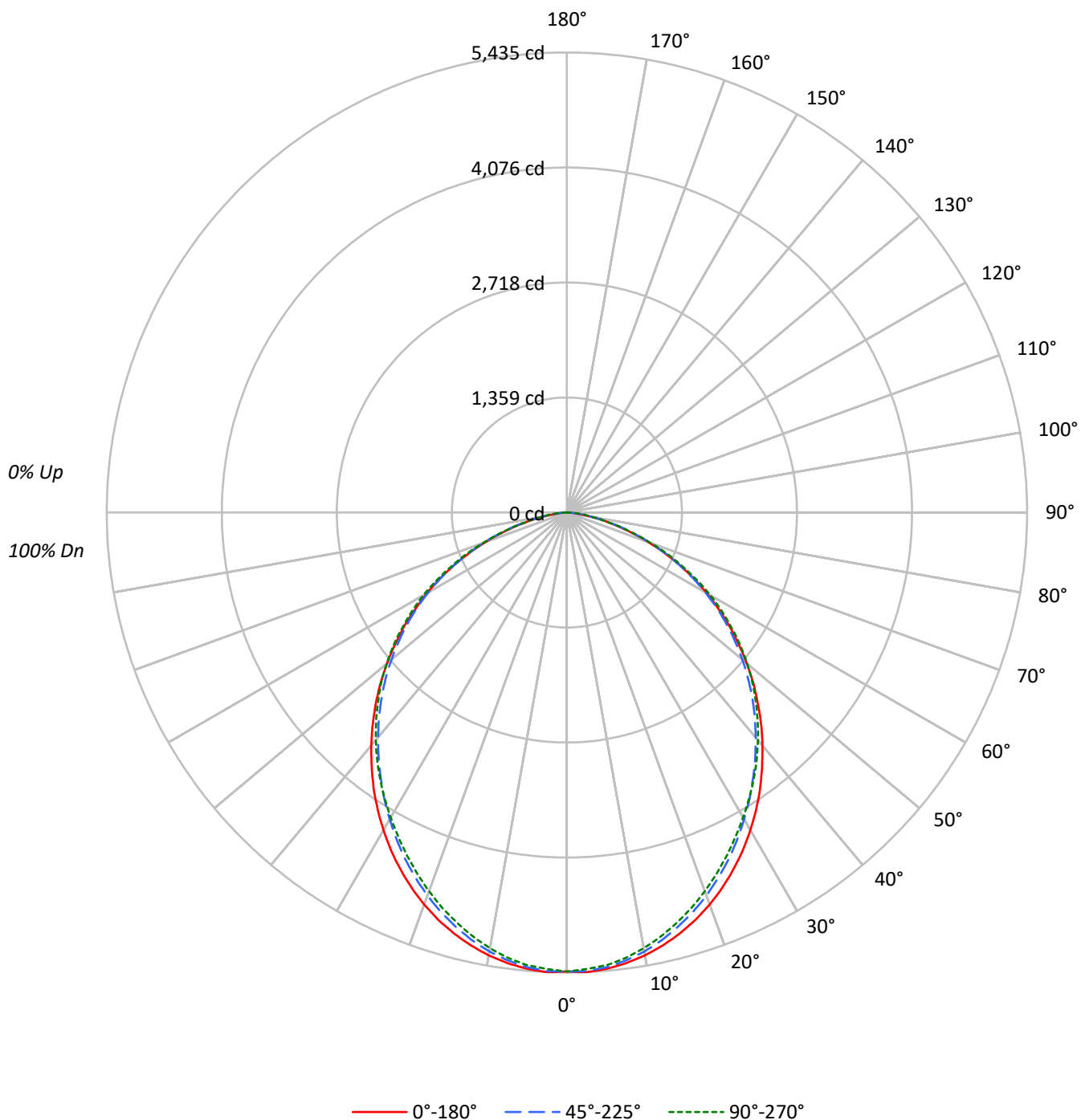
Lumens per Lamp: N/A
Luminaire Lumens: 13204.0 lumens
Efficiency: N/A
Efficacy: 82.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.15 / 1.28
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 160.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	110	105	101	98	107	103	99	96	99	96	93		95	92	90		91
2	100	92	86	80	98	90	85	80	87	82	78		84	80	76		81
3	92	82	74	68	89	80	73	67	77	71	66		74	69	65		72
4	84	73	64	58	82	71	63	57	69	62	56		66	61	56		64
5	78	65	56	50	75	64	56	50	62	55	49		60	54	49		58
6	72	59	50	44	70	58	50	44	56	49	43		54	48	43		53
7	67	53	45	39	65	53	44	39	51	44	38		50	43	38		48
8	62	49	41	35	61	48	40	35	47	40	34		46	39	34		44
9	58	45	37	31	57	44	37	31	43	36	31		42	36	31		41
10	54	42	34	29	53	41	34	29	40	33	28		39	33	28		38

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7297	7297	7297
5°	7309	7283	7251
10°	7259	7195	7141
15°	7173	7059	6989
20°	7058	6895	6818
25°	6907	6709	6635
30°	6733	6502	6465
35°	6536	6295	6317
40°	6313	6092	6166
45°	6070	5888	6002
50°	5804	5662	5815
55°	5503	5404	5571
60°	5131	5081	5274
65°	4671	4662	4797
70°	4035	4103	4165
75°	3219	3355	3299
80°	2188	2353	2376
85°	1149	1606	2047

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6070 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	510.0	3.9
10°-20°	1427.8	10.8
20°-30°	2087.2	15.8
30°-40°	2419.2	18.3
40°-50°	2414.0	18.3
50°-60°	2079.6	15.8
60°-70°	1456.5	11.0
70°-80°	679.5	5.1
80°-90°	130.1	1.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	4024.9	30.5
0°-40°	6444.1	48.8
0°-60°	10937.8	82.8
0°-90°	13204.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13204.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5423	5423	5423	5423	5423	
5°	5412	5392	5392	5360	5369	513
15°	5149	5113	5068	5013	5018	1451
25°	4652	4595	4519	4459	4469	2142
35°	3979	3906	3832	3820	3846	2486
45°	3190	3126	3094	3126	3154	2461
55°	2346	2294	2304	2355	2375	2094
65°	1467	1439	1464	1498	1507	1450
75°	619	612	645	643	635	665
85°	74	84	104	124	133	109
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5423.0	5423.0	5423.0	5423.0	5423.0
2.5°	5435.2	5417.7	5423.0	5398.0	5397.8
5°	5411.5	5391.7	5392.0	5360.2	5368.8
7.5°	5369.8	5347.0	5338.4	5301.7	5308.6
10°	5313.3	5284.9	5266.3	5222.4	5226.7
12.5°	5238.2	5206.6	5175.9	5124.3	5130.8
15°	5149.3	5112.8	5067.7	5012.9	5017.7
17.5°	5046.8	5004.3	4948.8	4886.6	4896.1
20°	4929.3	4881.2	4815.2	4750.1	4761.4
22.5°	4797.3	4744.3	4671.0	4608.4	4618.0
25°	4652.2	4595.4	4519.0	4459.2	4469.1
27.5°	4499.3	4435.8	4355.4	4304.4	4316.0
30°	4333.8	4266.5	4185.1	4143.0	4161.1
32.5°	4159.3	4090.0	4011.8	3984.0	4005.8
35°	3979.2	3905.7	3832.3	3820.2	3846.1
37.5°	3786.1	3719.3	3652.2	3655.7	3681.7
40°	3594.0	3524.8	3468.7	3482.5	3510.6
42.5°	3395.1	3330.1	3283.5	3309.1	3334.6
45°	3189.9	3126.5	3094.3	3126.5	3154.3
47.5°	2986.5	2923.5	2903.0	2941.0	2972.4
50°	2772.9	2715.6	2704.9	2751.5	2778.2
52.5°	2557.5	2503.2	2505.5	2556.5	2584.0
55°	2345.8	2293.5	2303.7	2354.7	2374.8
57.5°	2125.9	2084.9	2099.9	2146.9	2169.7
60°	1906.9	1868.9	1888.2	1936.7	1959.7
62.5°	1687.1	1654.9	1677.7	1722.5	1734.5
65°	1467.1	1438.6	1464.3	1497.6	1506.7
67.5°	1243.7	1223.9	1253.6	1280.9	1285.2
70°	1025.8	1005.4	1042.9	1062.4	1058.7
72.5°	813.9	802.9	836.3	848.4	838.3
75°	619.2	612.3	645.3	643.0	634.6
77.5°	438.6	436.6	462.9	457.9	455.5
80°	282.4	290.3	303.7	308.6	306.7
82.5°	159.5	170.9	181.9	204.0	213.1
85°	74.4	83.6	104.0	123.8	132.6
87.5°	25.1	32.4	43.3	47.1	44.4
90°	0.0	0.0	0.0	0.0	0.0

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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	17.84	19.42	18.20	19.74	20.05	18.03	19.62	18.40	19.93	20.25
	3H	19.30	20.72	19.68	21.05	21.41	19.53	20.95	19.90	21.28	21.64
	4H	19.73	21.06	20.12	21.41	21.79	19.96	21.29	20.35	21.64	22.02
	6H	19.94	21.17	20.35	21.54	21.93	20.18	21.41	20.59	21.78	22.17
	8H	19.96	21.14	20.39	21.53	21.93	20.23	21.41	20.65	21.80	22.20
	12H	19.96	21.09	20.39	21.48	21.90	20.26	21.39	20.69	21.77	22.20
4H	2H	18.40	19.74	18.80	20.08	20.46	18.56	19.89	18.95	20.24	20.62
	3H	20.04	21.15	20.45	21.55	21.95	20.24	21.35	20.65	21.75	22.15
	4H	20.55	21.55	20.98	21.97	22.40	20.76	21.77	21.20	22.18	22.62
	6H	20.84	21.71	21.29	22.15	22.61	21.07	21.94	21.52	22.38	22.84
	8H	20.88	21.70	21.34	22.14	22.61	21.14	21.96	21.60	22.40	22.87
	12H	20.90	21.63	21.38	22.10	22.57	21.20	21.93	21.68	22.41	22.88
8H	4H	20.75	21.56	21.21	22.00	22.47	20.94	21.76	21.40	22.20	22.66
	6H	21.09	21.76	21.59	22.25	22.73	21.30	21.98	21.80	22.47	22.94
	8H	21.16	21.77	21.68	22.27	22.76	21.42	22.02	21.93	22.53	23.02
	12H	21.20	21.73	21.71	22.23	22.79	21.52	22.05	22.03	22.54	23.10
12H	4H	20.75	21.48	21.23	21.95	22.42	20.94	21.67	21.42	22.14	22.61
	6H	21.09	21.70	21.61	22.21	22.69	21.30	21.91	21.81	22.41	22.90
	8H	21.20	21.73	21.71	22.23	22.79	21.45	21.98	21.96	22.48	23.04